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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/931,581

08/17/2001

Mamoru Takikita

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03/16/2006

SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER

HASHEM, LISA

ART UNIT

PAPER NUMBER

2645

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/931,581

Applicant(s)

TAKIKITA, MAMORU

Examiner

Lisa Hashem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show 'a frequency control portion for setting send and receive frequencies' in Fig. 3, element 7 as described in the specification. Fig. 3 only shows the frequency control portion for setting send frequencies as indicated by the arrow going in element 7 and the arrow going out of element 7. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando in view of Hassett.

Regarding claim 1, Ando discloses a narrow band communication vehicle-mounted apparatus or mobile device (Fig. 2, 1) comprising (see Abstract;):

a radio-communication portion (Fig. 1, 9) for sending and receiving with an on-road device or immobile device (Fig. 2, 2) via an antenna (Fig. 2, 6) (col.1, lines 19-27; col. 3, lines 54-63),

a control microcomputer (Fig. 2, 7) for controlling various equipment and a nonvolatile memory (Fig. 2, 8) (col. 3, lines 54-63),

wherein said control microcomputer inherently stores in said nonvolatile memory randomly generated communication registration identification data (LID; col. 1, lines 41-49) when communication is opened or when said apparatus starts up (Fig. 6: Start, 100; Fig. 7; col. 5, lines 21-31), and

communication is performed using communication registration identification data stored in said nonvolatile memory in a case where said apparatus is in a communication range when said apparatus starts up (col. 5, lines 21-55; col. 6, lines 10-22; col. 7, lines 55-63).

Examiner bases inherency because Ando only teaches one (ROM/RAM) memory in the mobile device and since there is only one memory device the randomly generated communication registration identification data must be stored there.

Ando discloses the apparatus in a communication range when said apparatus starts up. However, Ando does not disclose a field intensity measuring portion for detecting a radio field intensity and communication is performed where said radio field intensity is in a communication range.

Hassett discloses a narrow band communication vehicle-mounted apparatus or in-vehicle component (IVC) (see Abstract; Fig. 2, 16) inherently comprising (col. 12, lines 34-46): a radio-communication portion for sending and receiving with an on-road device (Fig. 2, 18) via an antenna (Fig. 14A, 73), a field intensity measuring portion for detecting a radio field intensity (Fig. 14A, 76), a control microcomputer for inherently controlling various equipment (Fig. 14A, 70), and a nonvolatile memory (Fig. 14A, 88) (col. 8, lines 24-53), wherein said apparatus receives communication registration identification data (new T1 signal) when communication is opened or when said apparatus starts up (when receiving this new T1 signal) (col. 8, lines 35-48; col. 15, lines 7-22), and communication is performed using communication registration identification data received in a case where said radio field intensity is in a communication range when said apparatus starts up (when vehicle decides to exit an upcoming ramp and the apparatus receives a T1 signal data) (col. 14, lines 19-56; col. 14, line 65 - col. 15, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Ando to include a field intensity measuring portion for

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detecting a radio field intensity and communication is performed where said radio field intensity is in a communication range as taught by Hassett. One of ordinary skill in the art would have been lead to make such a modification to include a field intensity measuring portion that detects radio field intensity and a radio field intensity that permits communication.

Regarding claim 3, the narrow band communication vehicle-mounted apparatus according to claim 1, wherein Andos further discloses said randomly generated communication registration identification data relates to an identification of the narrow band communication vehicle-mounted apparatus (col. 1, lines 41-49; col. 1, lines 59-67; col. 3, lines 35-39).

Regarding claim 4, the narrow band communication vehicle-mounted apparatus according to claim 1, wherein Andos further discloses said control microcomputer (CPU) stores in said nonvolatile memory randomly generated communication registration identification data (LID; Fig. 6, 100) only when said apparatus starts up (Fig. 6, START; mobile device executes the LID check processing immediately after entering the communication service area A) (col. 5, lines 21-31).

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,392,242 by Kai in view of U.S. Patent No. 6,426,706 by King.

Regarding claim 2, Kai discloses a narrow band communication vehicle-mounted apparatus (e.g. mobile unit located in a vehicle) (Fig. 8: 3, 4; Figs. 10 and 11) comprising: a radio-communication portion (Fig. 11: 93, 97) for sending and receiving with a base station (Fig. 1: 1, 2) via an antenna (Fig. 11, 91) (col. 5, lines 45-60), a frequency control portion (Fig. 11, 96) for setting send and receive frequencies (col. 1, line 61 – col. 2, line 22; col. 6, lines 18-34; col. 6, line 50 – col. 7, line 24),

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a control microcomputer (Fig. 11, 94b) for controlling various equipment and a memory (Fig. 11, 98) (col. 5, lines 47-51; col. 6, line 45 – col. 7, line 24), wherein said control microcomputer saves in said memory a radio frequency at which communication was performed (col. 6, lines 61-66), and communication is performed selecting said radio frequency saved in said memory as a first candidate when said apparatus starts up (e.g. mobile device is off-hook) (col. 6, line 67 – col. 7, line 24).

Kai discloses a memory device for storing channel numbers of all access channels and the corresponding field strength values (specific frequencies). However, Kai does not disclose the memory device is nonvolatile.

King discloses a narrow band communication vehicle-mounted apparatus (e.g. safety warning transceiver) (Fig. 1, 22; Fig. 2, 21) comprising:  
a radio-communication portion (Fig. 1, 36) (e.g. T/R switch or circulator) for sending and receiving with an on-road device (Fig. 1: 20a, 20b, 54) (e.g. other vehicles, safety warning transmitter) via an antenna (Fig. 1, 34) (col. 1, line 64 – col. 2, line 16; col. 2, lines 31-46),  
a control microcomputer (Fig. 1, 24) for controlling various equipment (col. 1, line 64 – col. 2, line 46) and a nonvolatile memory (e.g. ROM) (Fig. 1, 26) (col. 2, lines 5-6),  
wherein said control microcomputer saves in said nonvolatile memory a radio frequency at which communication was performed (col. 3, lines 25-33) (e.g. in learning mode), and  
communication is performed selecting said radio frequency saved in said nonvolatile memory as a first candidate when said apparatus starts up (e.g. when a user activates a button on a user

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interface (Fig. 1, 44) associated with the garage door function in operation mode) (col. 3, lines 35-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Kai to include a nonvolatile memory as taught by King. One of ordinary skill in the art would have been lead to make such a modification to include a nonvolatile memory that stores radio frequencies even if the narrow band communication vehicle-mounted apparatus is powered off.

### ***Response to Arguments***

5. In response to Applicant's remarks that Ando does not teach 'said control microcomputer stores in said nonvolatile memory randomly generated communication registration identification data when communication is opened or when said apparatus starts up'. Examiner disagrees. Examiner interprets the term 'nonvolatile memory' to mean a ROM (read-only memory) that contains or stores programs, information, and data that is being used by the device. The CPU executes the LID check processing immediately after entering the communication service area A and the LID that is generated must be stored in the ROM/RAM of the mobile device since it is the only memory device of the mobile device and the ROM/RAM stores information or data. Further, Applicant argues that Ando does not disclose 'wherein said control microcomputer stores in said nonvolatile memory randomly generated communication registration identification data only when said apparatus starts up'. Examiner disagrees. Ando discloses the mobile device starts up or executes the LID check processing when immediately after entering the communication service area A.

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6. Applicant's arguments filed 12-12-2005 on claims 1, 3, and 4 have been fully considered but they are not persuasive. Please see all rejection(s) above.

7. Applicant's arguments, see Amendment, filed 12-12-2005, with respect to the rejection(s) of claim 2 under Matsumoto have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made. Please see all rejection(s) above.

8. Accordingly this action is **NON-FINAL**.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US Patent No. 4,903,320 by Hanawa discloses an automobile equipped with a mobile communication system comprising a frequency control portion (e.g. synthesizer)

10. Any response to this action should be mailed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Or faxed to:**

(571) 273-8300 (for formal communications intended for entry)

**Or call:**

(571) 272-2600 (for customer service assistance)

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (571) 272-7542. The examiner can normally be reached on M-F 8:30-5:30.

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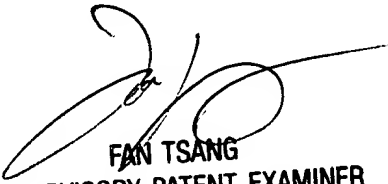
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LH

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March 8, 2006

  
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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600